

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-33. (Canceled)

34. (Currently Amended) A urethane elastomer which is the reaction product of a prepolymer (P) having a room temperature viscosity of about 1200 to 16000 cps and which is the reaction product of

a) methylene diphenylisocyanate or a prepolymer of methylene diphenylisocyanate and an about 500-1000 equivalent weight polytetramethylene ether glycol or polyoxypropylene/polyoxyethylene diol or triol having at least 21% residual NCO,

b) polytetramethylene ether glycol of about 500 to 1000 equivalent weight, and

c) a polyoxypropylene/polyoxyethylene triol or polyoxypropylene triol of about 1300 to 2000 equivalent weight,

the percentage weight/weight in the prepolymer (P) being about 32 to 72% of (a), about 52 to 22% of (b), and about 6 to 15% of (c), and the percentage of residual NCO in the prepolymer (P) being about 6 to 18% by weight,

which is ~~cured~~curable at room temperature with an approximately stoichiometric equivalent of a liquid curative consisting essentially of the following components:

(1) a polyoxypropylene/-polyoxyethylene diol of about 1000 to 2000 equivalent weight, (2) a polyoxypropylene/-polyoxyethylene triol of about 1300 to 2000 equivalent weight, (3) a chain extender having an equivalent weight of about 25 to 125, (4) a room-temperature liquid stable prepolymer (P) having a 6 to 18% residual NCO, (5) a diluent, (6) a degassing

aid, and (7) a urethane catalyst, the relative weight % amounts weight/weight being respectively 30-90%, 1-20%, 5-30%, 0-10%, 0-15%, 0.001-0.05%, and 0.006-0.5%, based on the weight of the liquid curative.

35. (Currently Amended) The urethane elastomer of Claim 34 wherein the percentage of residual NCO in the prepolymer (P) is about 11.5-13.5% weight/weight and ~~which~~ the liquid curative has a room-temperature viscosity of about 550-5000 cps, and which results in a cured urethane elastomer having the following properties after mixing and curing for seven days at room temperature:

| | |
|---------------------------------------|---------------------|
| Tensile strength (ASTM Method D-412) | about 1300-2700 psi |
| Elongation (ASTM Method D-412) | about 250-700% |
| Die C Tear (ASTM Method D-695) | about 140-400 pli |
| Split Tear (ASTM Method D-1938) | about 20-100 pli |
| Rebound (ASTM Method D-2632) | about 45-65% |
| Shore A Hardness (ASTM Method D-2240) | about 70-95 |
| Gel time (25°C) | about 14-40 min.. |

36. (Previously Presented) The urethane elastomer of Claim 35 wherein the percentage of residual NCO is about 11.5-13.5% by weight, the prepolymer (P) has a room temperature viscosity of about 3500 to 5000 cps, and the amounts of (4) and (5) in the curative are respectively 10-20 and 5-15% weight/weight.

37. (Previously Presented) The urethane elastomer of Claim 35 wherein the amounts of (4) and (5) in the curative are respectively 10-20 and 5-15% weight/weight.

38. (Previously Presented) The urethane elastomer of Claim 35 wherein the prepolymer (P) is present in an up to about 13% stoichiometric excess with respect to the curative.

39. (Previously Presented) The urethane elastomer of Claim 38 wherein the prepolymer (P) is present in about a 2 to 7% stoichiometric excess with respect to the curative.

40. (Previously Presented) The urethane elastomer of Claim 34 wherein the prepolymer (P) consists of about 54%, about 36%, and about 10% percent weight/weight of the stable prepolymer (P) ingredients a), b), and c) respectively.

41. (Previously Presented) The urethane elastomer of Claim 40 which is cured with an approximately stoichiometric equivalent of a curative consisting essentially of (1) a polyoxypropylene/-polyoxyethylene diol of about 1000 to 2100 equivalent weight, (2) a polyoxypropylene/-polyoxyethylene triol of about 1300 to 2000 equivalent weight, (3) a chain extender having an equivalent weight of about 25 to 125, (4) a room-temperature liquid stable prepolymer (P) having a 11.5 to 13.5% residual NCO, (5) a diluent, (6) a degassing aid, and (7) a urethane catalyst, the relative amounts weight/weight being respectively approximately 54%, 13%, 10%, 15%, 8%, 3.00%, and 1.10%.

42. (Previously Presented) The urethane elastomer of Claim 41 wherein the curative has a viscosity at room temperature of about 3000-5000 cps and a specific gravity of about 1.05-1.08.

43. (Previously Presented) The urethane elastomer of Claim 42 wherein the prepolymer (P) is present in an up to about 13% stoichiometric excess with respect to the curative.

44. (Currently Amended) The urethane elastomer of Claim 43 wherein the prepolymer (P) is present in about a 2 to 7 stoichiometric excess with respect to the curative.

45. (Previously Presented) The urethane elastomer of Claim 44 wherein the properties after mixing and curing for seven days at room temperature are as follows:

| | |
|---------------------------------------|-------------------|
| Tensile strength (ASTM Method D-412) | about 1550 psi |
| Elongation (ASTM Method D-412) | about 500% |
| Die C Tear (ASTM Method D-695) | about 250 pli |
| Split Tear (ASTM Method D-1938) | about 45 pli |
| Rebound (ASTM Method D-2632) | about 55% |
| Shore A Hardness (ASTM Method D-2240) | about 60 |
| Gel time (25°C) | about 20-30 min.. |

46. (Previously Presented) The urethane elastomer of Claim 45 wherein the degassing aid is a silicone emulsion.

47. (Previously Presented) The urethane elastomer of Claim 45 wherein the catalyst is a mixture of triethylene diamine and 2,3-dimethyltetrahydropyrimidine or bismuth neodecanoate.

48. (Previously Presented) The urethane elastomer of Claim 45 wherein the degassing aid is a silicone emulsion and the catalyst is a mixture of triethylene diamine and 2,3-dimethyltetrahydropyrimidine or bismuth neodecanoate.

49. (Original) A kit comprising a separately packaged prepolymer (P) of Claim 34, and a separately packaged liquid curative of Claim 34.

50. (Original) The kit of Claim 49 wherein the separately packaged liquid curative has a viscosity at room temperature of about 300-50000 cps and a specific gravity of about 1.02-1.15.

51. (Previously Presented) The kit of Claim 49 wherein the percentage of residual NCO in the prepolymer (P) is about

11.5-13.5% weight/weight and wherein the prepolymer (P) has a room temperature viscosity of about 3500 to 5000 cps.

52. (Previously Presented) The kit of Claim 51 wherein the amounts of (4) and (5) in the separately packaged liquid curative are respectively 10-20 and 5-15% weight/weight.

53. (Previously Presented) The kit of Claim 51 wherein the separately packaged liquid curative consists essentially of the stated components in the following approximate percentages: 54%, 13%, 10%, 15%, 8%, .005%, and 0.006% weight/weight in the curative respectively and has a viscosity at room temperature of about 3000 to 5000 cps and a specific gravity of about 1.05-1.08.

54. (Previously Presented) The kit of Claim 53 wherein the percentages weight/weight of a), b), and c) in the prepolymer (P) are respectively about 54%, about 36%, and about 10%.

55. (Original) The kit of Claim 53 wherein the degassing aid in the separately packaged liquid curative is a silicone emulsion and the catalyst is a mixture of triethylene diamine and 2,3-dimethyltetrahydropyrimidine or bismuth neodecanoate.